**Art of problem solving:**

Step -1: (Do not look at the data or structure/ schema of the data)

* Understand the problem statement thoroughly. It’s really important to understand every details of the problem in detail.
* Learn about the domain and previous solutions or work arounds to the similar problem.

Step -2:

* List out all the possible factors affecting the problem (reasons)
* Brain storm with your team mates with all experience to collect unbiased factors. Also include your client if possible (he might add some domain knowledge to the thought process).

Step -3:

* Do a proper research in google and gather all the possible references.
* Do a poll of all the results collected so far.

Data step:

* From your step-2, ask for the relevant data (You might not get all the data, but some).
* Understand the structure/ schema of the data and perform data cleaning if required.
* Check for data quality in every step from now.
* Perform a proper EDA (Univariate, Bivariate, multivariate)
* Choose a model supervised (Regression/ classification) or un-supervised (Clustering)
* Build models which performs well on un-seen data (using Cross-validation)
* Choose the model which is robust and give better prediction accuracy.
* Create dashboards/ or a .ppt with all the possible insights
* Give proper explanation and proof for all the results and summarize using root cause analysis.